Claims

1.   Voice portal hosting system, intended to be connected to a first voice telecommunication network in order for a plurality of users in said network to establish a connection with said system using a voice
5   equipment,

said system comprising a memory in which a plurality of interactive voice response applications have been independently uploaded through a second telecommunication network by a plurality of independent value-added service providers,

10   wherein at least a plurality of said interactive voice response applications uses a common speech recognition module run on said system.

2.   The voice portal hosting system of claim 1, wherein said common speech recognition module comprises a common user profile database.

15   3.   The voice portal hosting system of claim 2, wherein said common user profile database includes user preferences.

4.   The voice portal hosting system of claim 3, wherein said user preferences include a delivery address for goods and/or services ordered with said value-added service providers.

20   5.   The voice portal hosting system of claim 3, wherein said user preferences include a billing address and/or preferences for goods and services ordered with said value-added service providers.

6.   The voice portal hosting system of claim 1, wherein said common speech recognition module uses user-specific speech models.

25   7.   The voice portal hosting system of claim 6, comprising means for adapting said common speech models associated to a user during each dialogue between said user and each of said interactive voice response applications.

8.   The voice portal hosting system of claim 7, wherein said means for adapting said common speech models uses recorded users' speech samples for adapting said common speech models off-line.

9.   The voice portal hosting system of claim 1, wherein said common speech recognition module uses Hidden Markov Models, and further comprising a Hidden Markov Models adaptation module for adapting said models to said user.

10.   The voice portal hosting system of claim 9, wherein said Hidden Markov Models adaptation module allows for an incremental adaptation of said models.

11.   The voice portal hosting system of claim 1, wherein said common speech recognition module uses user-specific language models.

12.   The voice portal hosting system of claim 11, comprising means for adapting said common language models associated to a user during each dialogue between said user and each of said interactive voice response applications.

13.   The voice portal hosting system of claim 1, wherein said common speech recognition module uses selections previously made by said users.

14.   The voice portal hosting system of claim 1, wherein said selections previously made by said users are stored in said voice portal hosting system for improving the arborescence of the menus.

15.   The voice portal hosting system of claim 1, wherein at least a plurality of said interactive voice response applications use a common user identification module run on said system.

16.   The voice portal hosting system of claim 15, wherein said user identification module uses an identification of the equipment used by said user in said first telecommunication network.

17.   The voice portal hosting system of claim 16, being operated by a telecom operator of said first telecommunication network, wherein said user identification module uses an identification of the equipment used by said user in said first telecommunication network even when said identification is not available for the other B-subscribers of said first telecommunication network.

18.   The voice portal hosting system of claim 15, wherein said user identification module uses a voice-based user identification module.

19.   The voice portal hosting system of claim 15, wherein said common speech recognition module uses a speaker-dependant speech recognition algorithm, wherein said speaker is identified by said common user identification module.

20.   The voice portal hosting system of claim 1, wherein at least a plurality of said interactive voice response applications use a common billing module and a common clearing center for dispatching the collected amounts to said value-added service providers.

21.   The voice portal hosting system of claim 20, wherein said common billing module allows for the billing of transactions between said users and said value-added service providers on a common bill prepared by the operator of said voice portal hosting system.

22.   The voice portal hosting system of claim 20, wherein at least a plurality of said users have a deposit account on said voice portal hosting system which can be used for transactions with a plurality of said value-added service providers.

23.   The voice portal hosting system of claim 1, wherein at least a plurality of said interactive voice response applications use a user authentication module based on an electronic signature and/or on biometric parameters of said users.

5   24.   The voice portal hosting system of claim 1, wherein said second telecommunication network is a TCP/IP network.

25.   The voice portal hosting system of claim 24, wherein at least some of said interactive voice response applications are described with Voice extensible Markup Language documents.

10   26.   The voice portal hosting system of claim 25, wherein a compilation module run on said system compiles said interactive voice response applications.

27.   The voice portal hosting system of claim 1, wherein at least one free interactive voice response application is made available by the 15 operator of said system.

28.   The voice portal hosting system of claim 27, wherein said free interactive voice response application includes a free directory assistance service.

29.   Voice portal hosting system, intended to be connected to a 20 first voice telecommunication network in order for a plurality of users in said network to establish a connection with said system using a voice equipment,
        said system comprising a memory in which a plurality of interactive voice response applications have been independently uploaded 25 through a second telecommunication network by a plurality of independent value-added service providers,
        wherein at least a plurality of said interactive voice response applications uses a common speech recognition module run on said system,
        wherein said common speech recognition module comprises a

common user profile database including user preferences,

   .wherein said common speech recognition module further uses common user-specific speech models,

   wherein said system further comprises means for adapting
5 said common speech models associated to a user during each dialogue between said user and each of said interactive voice response applications.

  30. Method for allowing each of a plurality of value-added service providers to set up an interactive voice response application which can be used by a plurality of users, comprising:
10   independently uploading said interactive voice response applications through a second telecommunication network in a voice portal hosting system commonly used by said plurality of value-added service providers,

   wherein at least a plurality of said applications use a common
15 speech recognition module run on said voice portal hosting system..

  31. The method of claim 30, wherein said interactive voice response applications use a common user profile database stored in said voice portal hosting system.

  32. The method of claim 31, wherein said interactive voice
20 response applications use user preferences stored in said common user profile database.

  33. The method of claim 32, wherein said user preferences include a delivery address for goods and/or services ordered with said value-added service providers.

25 34. The method of claim 33, wherein said user preferences include a billing address and/or preferences for goods and/or services ordered with said value-added service providers.

  35. The method of claim 34, wherein said common speech recognition module uses common users' speech models.

36.   The method of claim 35, wherein said common speech models associated to a user are adapted during each dialogue between said users and each of said interactive voice response applications.

37.   The method of claim 30, wherein said common speech recognition module uses common users' language models.

38.   The method of claim 37, wherein said common language models associated to a user are adapted during each dialogue between said user and each of said interactive voice response applications.

39.   The method of claim 30, wherein at least a plurality of said interactive voice response applications uses a common user identification module run on said system.

. 40.   The method of claim 39, wherein said user identification module uses an identification of the equipment used by said user in said first telecommunication network.

41.   The method of claim 40, wherein said voice portal hosting system is operated by a telecom operator of said first telecommunication network, wherein said user identification module uses an identification of the equipment used by said user in said first telecommunication network even when said identification is not available for the other B-subscribers of said first telecommunication network.

42.   The method of claim 39, wherein said user identification module uses a voice-based speaker identification module.

43.   The method of claim 39, wherein said common speech recognition module uses a speaker-dependant speech recognition algorithm, said user being identified by said common user identification module.

44. The method of claim 30, wherein at least a plurality of said interactive voice response applications use a common billing module and a common clearing center for dispatching the collected amounts to said value-added service providers.

5   45. The method of claim 44, wherein said common billing module allows for the billing of transactions between said users and said value-added service providers on a common bill prepared by the operator of said voice portal hosting system.

46. The method of claim 44, wherein at least a plurality of said
10   users have a deposit account on said system which can be used for transactions with a plurality of said value-added service providers.

47. The method of claim 30, wherein at least a plurality of said interactive voice response applications use a user authentication module based on an electronic signature and/or on biometric parameters of said
15   users.

48. The method of claim 30, wherein at least some of said interactive voice response applications are described with Voice extensible Markup Language documents.

49. The method of claim 48, wherein a compilation module run
20   on said voice portal hosting system compiles said interactive voice response applications.

50. Method for allowing each of a plurality of independent value-added service providers to set up an interactive voice response application which can be used by a plurality of users, comprising:
25   independently uploading said interactive voice response applications through a second telecommunication network in a voice portal hosting system commonly used by said plurality of value-added service providers,

wherein at least a plurality of said applications use a common

speech recognition module run on said voice portal hosting system,

wherein said common speech recognition module uses common users' speech models,

wherein said common speech models associated to a user are

5   adapted during each dialogue between said users and each of said interactive voice response applications.

51.   Computer program product directly loadable into the internal memory of a digital computer, comprising software code portions for performing the steps of one of the claims 30 to 50 when said product is run

10   on a server connected to a first telecommunication network.